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Synthesis of the Critique of Land Management Planning

Volume 1

Critique of Land Management Planning

Synthesis of the Critique of Land Management Planning

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This Synthesis is a brief summary of the Critique of Land Management Planning, which consists of 11 documents, including this Synthesis. The Critique was conducted by the Forest Service with the help of The Conservation Foundation and the Department of Forestry and Natural Resources at Purdue University. The purpose of the Critique was to document what has been learned in a decade of planning and to determine how best to respond to the planning challenges of the future.

One hundred people inside and outside the Forest Service were involved in conducting the critique. They relied heavily on interviews and workshops with over 2,000 people who participated in or had responsibilities for conducting planning. These 2,000 people were a broad cross section of all those who were involved in planning, including forest supervisors, regional foresters, planners, members of interdisciplinary teams, local citizens, elected officials from local governments, Indian tribes, interest groups representing a broad range of interests, and representatives of other agencies. Written comments from an additional 1,500 interested people also helped shape the Critique.

The Critique is national in scope. Not all findings are applicable to all national forests or plans, but the 232 recommendations developed as part of the critique are designed to focus attention on those areas needing adjustment.

The main sections of this Synthesis are as follows:

- **Overview**
- **Original Expectations**
- **What We Experienced**
- **Lessons Learned**
- **Future Challenges**
- **Epilogue**

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Preface

The National Forest System began as an experiment in public land ownership. The experiment ran for nearly a century before the country decided to make the system permanent. Perhaps it is not unreasonable to anticipate at least one more century for the debate over what to do with the national forests.

John R. McGuire, past Chief of the Forest Service, from his address "The Outlook for the National Forests," delivered at Berkeley, California, February 5, 1981

For nearly 100 years, the national forests have helped mold the American Nation and the American character. Owned by all the American people, these priceless lands contribute to our material wealth, while enriching us physically, mentally, and spiritually. To take advantage of their bounty and to ensure that it will be available for future generations require foresight and vision, hence the need for planning.

Concern by the American people for the future of these lands has never been more intense, nor the management challenges greater. We are a pluralistic society, strengthened by the diversity of our views. Not surprisingly, we each have different ideas about our relationship to the Earth and its natural resources. Forest planning has created a new awareness of how difficult finding common ground in natural resources policy can be. Forest planning inexorably raises issues and stimulates controversy—forest by forest and region by region. These controversies concentrate our attention, heighten our perceptions, and raise important questions about how such lands ought to be managed.

People can debate issues and seek to reconcile conflicts about the use of specific parcels of land; they cannot be expected to compromise their deeply held values. Because of forest planning, we have a greater understanding and appreciation of the national forests. Success is not necessarily measured by a lack of controversy. Addressing conflicts often leads us to much greater recognition and understanding of differing views. Issues and controversies can be the stepping stones to building a collective vision about the national forests.

As editors and authors of this critique, we have strived to report faithfully the experiences and opinions of more than 3,500 people as they were expressed at workshops, in personal interviews, during informal conversations, and through written comments. We are humbled by the depth, breadth, and richness of their knowledge and insights.

Much credit goes to the 64 individuals who wrote chapters and sections of the critique report. Much credit also is due to the countless men and women inside and outside the agency who did their best in various aspects of planning. It is our hope that this critique will help them better understand the meaning of their work and help them face tomorrow's challenges in managing the national forests and making decisions about them.

Forest planning is an experiment in democratic government, testing new relationships between the public and the agency professionals who are charged with administering the public's resources. We know of no other public agency that has gone to such lengths to get advice from the people on how it should do its job. At its best, national forest planning is democracy in action.

This report is a call to the men and women of the Forest Service for rededication to their continuing responsibility of land stewardship. It also is a summons to action to citizens concerned about the future of these forests. If there is one message from national forest planning, it is this: We are all responsible for the safekeeping of the national forests.

Gary Larsen, USDA Forest Service
William E. Shands, The Conservation Foundation

Earth Day, April 22, 1990

Highlights of the Critique of Land Management Planning

> Now that the Forest Service has been developing Land and Resource Management Plans for 10 years, it is time that we step back and look at what has been accomplished. . . . We hope to improve future planning by identifying and building on past experiences and developing recommendations to guide future planning.
>
> *—Chief Dale F. Robertson, March 24, 1989*

This Critique was conducted by the Forest Service, with the assistance of The Conservation Foundation and Purdue University Department of Forestry and Natural Resources, along with the Bureau of Land Management. The Critique is documented in this Synthesis and ten other reports. The completed Critique was given to the Chief on May 2, 1990, and a meeting for decisions on action was held at the end of May.

One hundred people inside and outside the agency were enlisted to conduct the Critique. They represent a broad spectrum of disciplines. Their conclusions are based on contributions from over 3,500 people, including members of the public, interest groups, employees, other agencies, and Indian tribes.

Forest planning is a product of its history. It can only be defined within its own ecological, economic, sociopolitical, and legal contexts. The fundamental purpose of planning is to develop a frame of reference that provides predictability and understanding in the face of change and often conflicting values and world views.

There are problems with planning. There always will be—not because the process is flawed, but because the world is not perfect. Some of the problems we want planning to solve are intractable. Many others are merely difficult. The central question therefore becomes: "How can we improve planning to help us better deal with the problems we face?"

Planning by its very nature attempts to build bridges between often conflicting world views. It is no surprise that planning was a very intense experience, with frustration expressed by many who were involved in planning. *But, there is also a general feeling that individuals inside and outside the agency did the best they knew how*, in a situation that few fully understood.

Planning is the gateway to meeting both the spirit and intent of the many laws governing natural resources, particularly the National Forest Management Act and the National Environmental Policy Act. *The real challenge has been that*

each law changes the way the agency does business, and change is not easy. That the struggle in forest planning was difficult attests not to flaws in the basic legislation, but instead to the high-reaching goals expressed in various laws.

The most important realization is that *planning is not the exclusive domain of experts, planners, or technical processes.* Planning deals with issues that people care deeply about. Planning decisions result in the allocation of scarce resources among competing needs. As a result, planning is often contentious. Planning, as with the issues it addresses, often moves by fits and starts. Rather than being isolated and insulated, planning is immersed in our country's social and political milieu. *A key operational recommendation to ensure success in dealing with social and political considerations is that there must be personal leadership and commitment to planning from each Forest Supervisor.*

We have individually and collectively learned a great deal about what constitutes good planning. Many who were involved in day-to-day planning will find a familiar ring to information contained in the Critique. The problems, successes, and future challenges captured as part of the Critique are not new, but are those that many of us experienced and were part of.

Great strides have been made in Forest Service planning. Citizens were involved to an unprecedented extent. Interdisciplinary teams became a standard way of doing business. A broader range of resources was considered than ever before. Many issues were resolved, and unresolved issues have become more sharply focused. *Citizens' awareness of national forests is higher than ever before.* Analytical tools and procedures have been improved. Many important relationships, with citizens, local officials, other agencies, and Indian tribes, have been formed. And finally, our Forest plans are the best plans we have ever developed.

There is remarkable consistency in the findings of the technical teams, The Conservation Foundation and Purdue University's efforts, and internal and external comments on the Critique. The findings originated from the work of the various Critique teams and were shaped by dialogs from two sets of workshops conducted across the country—one set for other agencies and Indian tribes and the citizen's forums conducted by The Conservation Foundation and Purdue University. Many other people also were involved, including the Forest Service steering committee, technical team leaders, The Conservation Foundation and Purdue University, members of the Chief and Staff, Washington Office directors and staff, regional directors of information and planning, regional representatives, and members of the public.

Major Findings of the Critique

Adjustments are needed in the following areas:

- Citizens', lawmakers', and the agency's expectations of planning.
- The agency's attitude toward and conduct of public involvement.
- How the agency conducts planning.

- The simplification and clarification of planning procedures.
- The implementation of plans, particularly to ensure that they are followed and used.
- The connections between appropriations and forest plans.

Summary of Recommendations

The Critique pulled together and focused people's ideas about changes needed to meet future challenges. Seven major recommendations were rigorously developed from 232 recommendations that came from the various Critique efforts. Adjustments are suggested for many aspects of how the agency does business.

Planning

Recommendation I: *Simplify, Clarify, and Shorten the Planning Process.* Accomplish this through changes in Federal regulations, the Forest Service Manual and Handbooks, and other direction. Provide for incremental forest plan revision. Give the maximum responsibility and authority permitted by law to local resource managers. (51 recommendations)

Recommendation II: *Ensure High-Quality Planning.* Take steps to build on what we learned over the last decade to ensure that planning is conducted to consistently high-quality standards, in a timely manner, with the full involvement of forest supervisors, the public, cooperators in other agencies, and Forest Service Research. (90 recommendations)

Organizing

Recommendation III: *Improve the Organizational and Administrative Infrastructure of Planning.* Initiate actions to better organize and administer forest planning. Pay particular attention to the integration of various staff functions, including the State and Private Forestry and the Research branches. Institutionalize planning as a profession in the Forest Service. (37 recommendations)

Recommendation IV: *Strengthen and Clarify the Ties Between Forest Plans and Programming, Budgeting, and Appropriation Activities.* This includes actions under the direct control of the agency, as well as activities by the Department of Agriculture, Office of Management and Budget, and congressional appropriations. (13 recommendations)

Implementing

Recommendation V: *Define, Clarify, and Explain the RPA, NFMA, and NEPA Processes, and Explain How They Fit With the Agency's Framework for Multilevel Planning, Decisionmaking, and Management.* Educate agency employees, citizens, and cooperators at all levels about their respective roles and how the pieces fit. (19 recommendations)

Recommendation VI: *Develop a Comprehensive Strategy and Clearly Assign Responsibilities for Forest Plan Implementation and Maintenance.* (15 recommendations)

Controlling

Recommendation VII: *Refurbish the Mechanisms for Quality Control, Management Review, and Forest Plan Monitoring.* Use forest plans as the standard for measuring both individual and organizational performance. Find ways to broadly disseminate the results of quality control and management reviews, and decisions from appeals and litigation. (7 recommendations)

Overview

The Charter

The Forest Service, with the help of The Conservation Foundation and the Department of Forestry and Natural Resources at Purdue University, has conducted a yearlong critique of the land and resource management planning directed by the National Forest Management Act (NFMA). The purpose of the critique is to reflect on what has been learned from more than a decade of planning, to recommend adjustments where necessary, and to identify future challenges. This summary is a synthesis of ten reports examining various aspects of planning. A list of the reports is included at the end of this report.

Critique Procedure—Simultaneous Internal and External Reviews

The critique was conducted by 100 experts inside and outside the agency, representing a broad spectrum of disciplines. Their conclusions are based on contributions from over 3,500 people, including members of the public, employees of the Forest Service, representatives of other agencies, and Indian tribes. A steering committee chaired by the Director of Policy Analysis provided overall direction and coordination. The critique employed a coordinated approach of simultaneous internal and external reviews.

The internal review was conducted by six teams within the Forest Service; it involved interviews with and comments from Forest Service employees and people outside the agency who had been involved in planning. Some teams obtained a substantial number of comments from other agencies and people outside the agency. The Coordination team conducted nine regional workshops for other agencies and Indian tribes and conducted 195 interviews of line officers and staff representing all Forest Service regions and organizational levels.

The external review was conducted primarily by The Conservation Foundation and Purdue University. They held a "Citizen's Forum on National Forest Planning" at seven locations across the country, and in Washington, D.C.

Acronym alert: No Government publication would be complete without acronyms. In this publication, we are trying to hold the line at two.

NFMA = National Forest Management Act of 1976, the law that directs national forest planning.

NEPA = National Environmental Policy Act of 1969, the law that requires the Government to consider and disclose the environmental implications of its proposed actions.

It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, and comes short again and again, because there is no effort without error and shortcomings.

Theodore Roosevelt, from his address, "Citizenship in a Republic," delivered at the Sorbonne in Paris, April 23, 1910

Planning Under NFMA and NEPA

The National Forest Management Act and its attendant regulations and policies collectively deploy the most rigorous analytic and information requirements for planning by a natural resource agency. By necessity, the first round of planning was a learning experience. As a result, early forest planning requirements were not understood, accepted, and supported well enough Service-wide to permit the development of consistent decision statements nor to clearly define the questions the planning analysis effort was to address.

What exactly is a forest plan supposed to do? This was the question around which all others revolved. Without prior experience in such comprehensive planning efforts, it was a question not easily answered. Determining the appropriate scope, nature, and extent of forest plan decisions has been a difficult process of trial and error. Reduced to its essentials, forest planning should do four things:

1. *Determine resource capability.* Forest planning should faithfully characterize the forest's resources—its capabilities and limitations.

2. *Identify people's needs—current and future demands.* Forest planning should accurately identify what people locally and nationally want and need from the forest while also considering the needs of future generations.

3. *Find the best match.* Forest planning should find the match between capabilities and demands that best meets the needs of the American people, thus enabling the Forest Service to carry out its mission to Care for the Land and Serve People.

4. *Educate on all sides.* Forest planning should educate everyone—Government officials, representatives of interest groups, and citizens. Education is one of the most important results and functions of planning. Learning how forest planning fits into the various processes by which Government works has been a difficult challenge. Planning can be very contentious. Forest plans continue to evolve and be shaped by conflicts. It has been a challenge taking the time and having the patience to allow the many participants to learn to deal with their problems.

The success of forest plans and planning depends on the definition of success. This in turn, is shaped by people's expectations of planning. Almost all people initially had unreasonably high expectations for what could be accomplished by forest planning. People expected quicker results, and they expected that planning would be simpler and easier. People expected planning to be more convincing, to resolve more difficulties, and to be more definitive than it has turned out to be.

People in the agency have found that implementable decisions require collective public vision and support. They have found that planning at its best results in a clearly articulated vision of the desired future condition for the forest forged in public debate. This vision then serves as a standard for evaluating plan decisions and subsequent projects. A significant number of forest supervisors sampled across the country believe that their plans do a good job of expressing a vision for their national forest.

We Have All Learned a Lot

People all reported planning to be a very intense experience. There was frustration, *but there is a general feeling that individuals inside and outside the agency did the very best they knew how*, in a situation that evolved over time as skills and knowledge developed. Planning over the last decade could best be characterized as a challenge to meet both the spirit and intent of NFMA, NEPA, and many other important laws governing natural resources. *The real challenge has been that each law changed the way the agency does business. Such change is not easy.* That the struggle in forest planning was difficult attests not to flaws in the basic legislation but instead to the loftiness of the goals expressed in various laws.

Probably the most important realization that people inside and outside the agency have come to over the last decade is that *planning is not the exclusive domain of experts, planners, and technical processes.* Planning is not something that planners do—it is something that they help other people do. Planning must address issues about which people deeply care. Planning decisions result in the allocation of scarce resources among competing needs. As a result, planning is often contentious. Planning, as with the issues it addresses, sometimes moves by fits and starts. Rather than being isolated and insulated, planning is immersed in our country's social and political milieu. *A key operational recommendation to ensure success in dealing with social and political considerations is that there must be personal leadership and commitment to planning from each forest supervisor.*

Great strides were made over the past decade in Forest Service planning. Citizens were involved to an unprecedented extent. Interdisciplinary teams became a standard way of doing business. A broader range of resources was considered than ever before. Many issues were resolved; unresolved issues are more sharply focused. *Citizens' awareness of national forests is higher than ever before.* Analytical tools and procedures have been greatly improved. Many important relationships, with citizens, local officials, other agencies, and

Indian tribes, have been formed. Finally, our forest plans are the best plans we have ever developed.

In the critique, we reviewed and analyzed people's successes, problems, and ideas for changes to meet the challenges of the future. *We learned a great deal, individually and collectively, about what constitutes good planning.* Many who were involved in day-to-day planning will find a familiar ring to information contained in the critique. The problems, successes, and future challenges captured as part of the critique are not brand new, but many of us experienced them and were part of them.

Future Challenges

As the direct result of planning under NFMA and NEPA, all who were associated with planning have developed more realistic expectations about what can be accomplished. People inside and outside the agency also have developed strong expectations about how planning should be conducted—that the public be involved from the very beginning; that a vision for the forest be developed early on; that forest supervisors take a strong leadership role; that there be a good match between the analytical tools and the questions at hand; that there be balance and integration for all resources; and that decisions be made openly.

Major Findings

The major finding of the critique is that adjustments are needed in the following areas:

- Citizens', lawmakers', and the agency's expectations of planning.
- The agency's attitude toward and conduct of public involvement.
- How the agency conducts planning.
- The simplification and clarification of planning procedures.
- The implementation of plans, particularly to ensure that they are followed and used.
- The connections between appropriations and forest plans.

Recommendations

Seven major recommendations were rigorously developed from 232 detailed recommendations that came from the various critique efforts. The detailed recommendations are documented in the ten critique reports and are summarized on pages 19 through 21 of this report. Over the past decade, the Forest Service and the people who are interested in national forests have learned much about forest planning. They have come to recognize that forest plans are important—that plans are the very heart of the agency's framework for forest management. Recommendations, therefore, apply to all four management activities—planning, organizing, implementing, and controlling. The

recommendations are designed to build on the base of what we have learned so that we can continue to improve our relationships and the outcome of the planning process.

Planning

Recommendation I: *Simplify, Clarify, and Shorten the Planning Process* (51 recommendations).

Recommendation II: *Ensure High-Quality Planning* (90 recommendations).

Organizing

Recommendation III: *Improve the Organizational and Administrative Infrastructure for Planning* (37 recommendations).

Recommendation IV: *Strengthen and Clarify the Ties Between Forest Plans and Programming, Budgeting, and Appropriation Activities* (13 recommendations).

Implementing

Recommendation V: *Define, Clarify, and Explain the Resources Planning Act, NFMA, and NEPA Processes, and Explain How They Fit With the Agency's Framework for Multilevel Planning, Decisionmaking, and Management* (19 recommendations).

Recommendation VI: *Develop a Comprehensive Strategy and Clearly Assign Responsibilities for Implementation and Maintenance of Forest Plans* (15 recommendations).

Controlling

Recommendation VII: *Refurbish the Mechanics for Quality Control, Management Review, and Forest Plan Monitoring, Using Forest Plans as the Standard for Measuring Both Individual and Organizational Performance* (7 recommendations).

Original Expectations

Success in Planning Is Highly Subjective

Expectations of planning were quite diverse, depending on the many different interests each of us had in the national forests. Our expectations were often directly tied to our feelings and emotions. Our view of whether planning was successful was determined in large part by whether our initial expectations were met, how we felt as a result, and what learning took place along the way. What were some of our expectations?

Interest groups had very specific expectations defined by the goals of their organizations. Their criterion for success was whether or not forest plans produced their desired outcomes. A recent careful review of their criticisms of land management planning reflects each of their particular expectations. Many of the groups feel that the "promise of forest planning" has not been met.

Environmental groups believed NFMA mandated a reform of the Forest Service and its programs—a change from the perceived dominant management of forests for commodity production and a reduction in damage to its resources. They expected to see more enhancement and protection of noncommodity forest resource values.

Timber industry groups expected a different result from planning. They believed that forest plans would find more ways to meet national demand for wood and not fall short of that demand. They felt that targets were set through the Resources Planning Act Program and regional guides, that national forests would meet the targets, that clear-cutting was mandated, and that management plans would not have a noncommodity bias. They expected that the planning process and analyses would be clear and understandable (an expectation shared by environmentalists). They also felt that economic efficiency would be a paramount concern, and that the analysis of departure from even-flow would be the rule, not the exception.

Professional foresters and resource consultants expected that the Resources Planning Act Program (the national plan) would play a major role in both the planning and budget process, budgets would reflect forest plans and the Resources Planning Act Program, contemporary issues would be dealt with, and the process would be simple or at least understandable.

Most members of the general public had no idea of what to expect. Those who did have expectations thought that the plans made promises and expected the agency to meet those promises. Members of the public also had expectations similar to those of the interest group with which they were most closely aligned.

Academic critics took a broader view, offering insights about the agency's decision arena and its characteristics as an institution. However, assumptions that forest planning would try to be a rationalistic, "top-down" process, and strive for a "right" answer, lie at the heart of their critiques.

Not surprisingly, each defined success in terms of his or her own particular expectations. Success in planning is in the eye of the beholder. There were as many concepts of what constitutes success in planning as there were groups interested in planning. Consequently, initial expectations were often unrealized.

In Search of the Elusive "Right" Answer

Early in the planning process, most people in the agency believed planning would essentially be a scientific process. Many felt if we just brought the facts together and ran the FORPLAN model, the "right" answers would unfold and everyone would be happy. After 10 years, to our dismay, we found that planning was much less scientific and much more social and political than we first expected.

Given the not uncommon expectation 14 years ago that NFMA planning would produce scientific solutions and avoid the entanglements of politics, the technological emphasis that characterized the planning process is not surprising.

The Forest Service Had the Highest Expectations

The agency itself had the most lofty expectations. Chief Emeritus R. Max Peterson expressed those expectations in a lecture at the College of Forestry, Oregon State University, at Corvallis, Oregon, on November 3, 1988. He said that the agency initially expected forest plans would:

- Be more balanced and better integrated than previous plans.
- Enable the public to better understand what is planned and why, thereby earning more public support and reducing controversy.
- Reduce unexpected adverse effects of forest management, improve coordination, and better identify complementary relationships among resources.
- Be better and less costly than implementing separate functional plans.
- Result in more balanced financing to carry them out.
- Result in less appeals and litigation because plans would be better understood and accepted.

Finally, the agency hoped, as Senator Humphrey said, "Forest managers could practice forestry in the forest and not in the courts." Plans met only some of these expectations. The agency, like the public, expected more than was actually achieved.

Expectations in Retrospect

Change in the agency has been slow. Commodity production does not proceed with greater certainty. While many noncommodity values are better represented in plans, many still see these values to be at great risk. Controversy seems unabated.

Many initial expectations, particularly those that would have met the specific aim of a single interest group, were not met. Leaders of many national special interest groups articulate a high degree of disappointment.

Even though original expectations were not always satisfied, many concur that our efforts were not in vain. Even though we did not receive broad-based acclaim for our decisions, we were often commended for our sincere attempt to meet some very difficult expectations. Expectations for future planning need to be seasoned by what was actually possible to achieve during the last decade of planning.

What We Experienced

Experience is a great teacher. Everyone involved in Forest Service planning efforts learned something. The more involved a person was, the more he or she learned. Here are a few highlights of what people experienced.

Interest Groups Have Flourished as a Result of Planning

Forest planning stimulated a myriad of interest groups to actively promote and support their particular points of view. Single-interest advocacy positions were vehemently expressed within the agency as well as outside it. There were relatively few advocates of multiple use in comparison. Numerous issues that heretofore were largely decided by the agency's decentralized decision process were elevated by controversy into the realms of administrative appeals, judicial review, and political decisionmaking.

Public Involvement Works Best Through Long-Term Relationships

We learned that relationships are vital. People expect us to build ongoing relationships with them. People gave us the unequivocal message that public involvement is not something to be done once at the beginning of planning and once at the end. People want us to interact with them and give them feedback so that they as well as we can learn from the dialog. People expect us to involve them, not because we are required to but because we value their contributions, and because better decisions will result.

Forthrightness Increases Trust and Acceptance

We experienced much confusion about how our decisions are made. People said their trust and acceptance would increase if they understood how our decisions were made and who made them—even if they did not fully agree with the decisions. They also told us that doing what we say we will do is the basic foundation of their trust. In cases where no one knows or will say how decisions are made, credibility is reduced.

Technical Answers to Social and Political Issues Alienate Many People

We learned that technical answers alone are inadequate to deal with social issues. When the effort is made to resolve social and political problems solely with technical solutions, many whose continued participation we need in the future are alienated.

Technical Jargon Was a Barrier to Communication, Internally and Externally

The technical terms and language used in planning were a barrier to communication. Over the last decade, our language became so technical that many people in the agency could not understand each other. We often used the following terms with our publics: *tentative suitable lands, benchmark runs, analysis area,* and *management indicator species.* These kinds of terms made

our planning documents difficult to understand and ultimately resulted in important communication failures. Many people, including our own employees, just did not read them. External and internal understanding of planning was therefore inhibited.

We Lack Skill in Interpersonal Communications

We were told by many agency employees and workshop participants that agency personnel needed much improvement in interpersonal communication skills. People do not expect perfection on our part, but they do expect us to listen, learn, and make changes when warranted. Often, the agency could not effectively deal with people's values, emotions, and feelings about social concerns or situations. This was most prevalent in coordinating with Indian tribes. Frequently, Forest Service coordination processes were not culturally sensitive and were therefore ineffective. Coordination was found to be most effective where personal relationships with cooperators were established before planning began.

Cooperating Agencies Did Not Know What To Do

We found that in many instances cooperating agencies did not understand their role in the planning process. Because the planning process was new, and initially ambiguous, some agencies had unrealistic expectations about how they could influence decisions or participate in the process.

We Became Enamored With Our Analysis Tools

The Forest Service is an agency of resource professionals who by tradition take great pride in their technical ability to determine what is best for the land. Agency resource professionals are trained to effectively use technical tools to solve scientific problems. This tradition often led people in the agency to become enamored with the technical and analytical dimensions of planning (for example, estimating resource potentials) and sometimes overlook the social and political considerations of planning (for example, will people's needs be met?).

We Have Problems With Basic Resource Information

We found that our data for many nontimber forest resources were often limited and of low quality. For example, in a number of cases, basic information on soil and water resources, plant and nongame wildlife species, and recreation was out of date or lacking sufficient detail. Often, such resource data were collected and compiled on a resource-by-resource basis, providing little insight into how these resources interacted with management activities.

Our Approach to Planning Was So Complex That Very Few Fully Understood It

People expect us to help them understand planning. They all found the planning process to be extremely confusing. They felt that *we* did not understand the process, or that we could not explain it if we did. People expect us to create ongoing opportunities in planning that will maximize the payoff from their investment of time and energy.

Planning Procedures and Direction Frequently Changed

Integrated resource planning of the magnitude envisioned by NFMA had not been attempted when forest planning began. Early on, the agency did not always understand what planning direction to provide, nor how much. As time passed, planning direction became highly specific. Evolution of expectations and need meant that direction frequently changed. Confusion within the agency and with the public resulted. This caused the agency's progress in planning to decline significantly. It seemed that with new planning direction, portions of the developing plans had to be redone. Plans were similarly affected by regional and national oversight reviews. This start, stop, do-it-over pattern had negative ramifications throughout the process.

Seeing the National Forest as a Unit

The change in philosophy from managing resources individually to managing them in an integrated manner has proven to be a struggle for the Forest Service. The struggle was most evident with the interdisciplinary planning teams that prepared forest plans. We found that, at times, interdisciplinary efforts were thwarted by traditional biases not to view resource management in an integrated way. The academic background of resource professionals tended to emphasize a single or dominant resource instead of an integrated approach to resource management. Therefore, team members often championed the cause for resource areas that they represented. This struggle was exacerbated where the membership and leadership of interdisciplinary planning teams were not well thought out to achieve resource integration and balance.

Lessons Learned

Forest Planning Was More Difficult Than Anyone Expected

Using a technical planning approach to deal with social and political necessities presents a particularly difficult challenge. Planning under NFMA was primarily a technical and systematic process that was designed to reach the "right" answer. Unfortunately, the pressing social and political problems that we face are not inherently orderly, systematic, or technical. Instead, they are often driven by strongly held opposing values. Social and political problems usually yield only difficult choices—not "right" answers. The resulting clashes have been frustrating for all.

Despite the Confusion, Stewardship Is Still What Planning Is All About

Stewardship—taking care of the national forests—is at the heart of all forest plans. However, national forests also are viewed as a wellspring of goods, services, and amenities. Establishing limits on the use of the national forests is difficult and requires justification with hard facts and numbers. Ecosystems are not easily reduced to numbers. Resource allocation decisions are doubly difficult because our understanding of the critical factors keeps changing. In addition, many of our basic resource inventories are outdated and not balanced. We find that much of our basic resource information was collected to answer yesterday's questions, not those of today or tomorrow.

Knowing Which Decisions We Make in Forest Plans

After talking with and listening to many different groups and individuals, people do not understand what decisions were made in forest planning nor how such decisions were justified. Participants at several workshops said that the agency will have to dispel the impression that forest planning is, in the words of one participant, "used to justify predetermined decisions." Some thought that the computer models were making the decisions. Some people felt that decisions were made to justify the status quo, and others said decisions were entirely political or came down from the top. Our inability to state clearly and explain what decisions were to be made in forest plans, and how we made them, caused confusion and loss of credibility.

We Can Influence How the Public Will Be Involved

The amount of public participation conducted has been unprecedented. Some aspects of quality, however, need attention. Public participation is one of the most important strengths of planning under NFMA. The public involvement effort conducted by the Forest Service may be the most extensive ever undertaken by a Federal land management agency. Improvements are needed in the following areas.

We must first recognize and accept that planning has important social and political dimensions. We learned the hard way that if we ignore these aspects, the planning process breaks down, and plans cannot be completed or implemented.

Because the matching of people's needs with the capabilities of the resources is the crux of the planning problem, we conclude that many of our plans had problems because people perceived that the forest plans did not adequately reflect consideration of the full range and character of what people wanted. Where plans have been successful, the attention to people's needs (emotional, symbolic, and organizational, as well as economic and community needs) were given consideration along with the resource capabilities and commodity schedules.

Building long-term relationships is essential, and Forest Service people have fostered many of them. However, many people with environmental interests still feel left out. Strong relationships with all factions regardless of their stance is essential for forming sound public policy and making decisions in the best interests of the American people.

Recognizing that various groups have different mandates, the agency must give assurance to each that their comments are heard, understood, and will be considered in planning and making decisions. Also, there is a distinct difference in how the agency needs to address those who have an interest in national forests and those who have overlapping or shared responsibilities by law.

We found that decisions are more informed and readily accepted when based on an involved, open management style. Forest managers need to engage in meaningful dialogs and build effective working relationships with our publics and other agencies, ranger district by ranger district, national forest by national forest, and region by region; then, after all concerned have been heard, they need to think through carefully, articulate, and communicate the decisions made and the rationale behind them.

Leadership by regional foresters, forest supervisors, and district rangers is crucial. Many line officers have done very well, but we have found a lack of consistency. Some have carried out only a minimum of public involvement and have experienced difficulties. Others have struggled to build a consensus among conflicting interests when none was possible.

Listening, learning, and adapting are essential to building trust, and trust is the key. We have found that trust develops only when the Forest Service and the people with whom it works demonstrate the capacity to listen, learn, adapt, and *follow through* on commitments.

We Can Set the Stage for Constructive Involvement of Other Agencies

We found that in many instances cooperators did not understand their role in the land management planning process, and thus had unrealistic expectations about how they could influence decisions or participate in the process. In many cases, the various missions of the cooperators required special coordination measures. Most cooperators and elected officials felt strongly that their role in the planning process should differ from that of the general public.

Sometimes, when a lack of coordination or communication with other agencies or Indian tribes resulted in conflict, cooperators used the administrative appeal process to open up the planning process. We found a fundamental inconsistency in how Forest Service line officers regard the use of mediation and negotiation to achieve consensus. Mediation and negotiation are generally viewed as acceptable techniques for the resolution of disputes raised in appeals or litigation but are not viewed as acceptable for resolution of disputes raised during the process of coordination.

We Sometimes Had Difficulties in Making Resource Estimates

We found it difficult to make integrated estimates of resource production potentials. There were problems with both analytical tools and data. For those resources where analysis techniques and tools existed (for example, timber), the data fit the tools but were often viewed as deficient. For other resources where no analysis techniques or tools existed (for example, nongame species), data and inventory needs could not be specified. Other complexities included the lack of agreement on resource definitions and the lack of acceptable measures to characterize a resource in its quantity or quality. Often, for many of the above reasons, the resource analyses were not adequately balanced with more rigorous analysis being conducted for timber resources.

Single-Resource Advocacy Sometimes Fragmented Forest Plans

The tension between single-resource advocacy and the NFMA-mandated interdisciplinary approach is a concern throughout the organization. Processes are generally not in place to aggregate the forest plans into an integrated regional vision. Generally, when forest plans are reviewed in the regions and the Washington Office, they are reviewed by single-resource staff areas, often resulting in changes that bring the plan back in line with the traditional single-resource consideration approach.

A Very Important Function of Planning Is Education

Increased knowledge of all involved is probably the most important result of forest planning. The technical team reports found that in a number of contexts, substantial learning had occurred during forest planning. Members of the public learned about the resources of their nearby national forest and its economic and social effects for their community. Various resource professionals learned about other resources on the Forest through their experience on interdisciplinary teams. Forest managers learned from working with the interdisciplinary teams. Interest group members learned of the complexity and limits of forest systems.

All participants in forest planning learned about working with people with different beliefs and value sets. New personal relationships were formed, and even though they were formed in an environment of conflict, a foundation for future cooperative action has been forged. State and local governments became involved with forest planning in more meaningful ways than before. These governments themselves evolved new ways of responding to the opportunity offered by forest plans.

Local Problems Are Easier To Solve

Solutions are easier at the local level. The spirit of compromise—of finding and accepting solutions that work for now—seems to be strongest at the local level and weakest at the national level. At the national level, interest groups act to sharpen lines of separation to ensure that their position can be clearly stated. National interest groups often work to maintain a continuous state of conflict, rather than settling for something less than a complete acceptance of their particular position.

Forest Plans and Forest Budgets Often Do Not Match

The relationship between forest plans and the budgeting process continues to frustrate many inside and outside the agency. We found that although forest plans represent an integrated approach to resource management and specify a desired future condition for the land, the plans cannot be realized without appropriate funding. Often, the historical and political budgeting decisions that are reflected in final appropriations change the priorities of the plans during their implementation.

Plans Are Becoming the Heart of National Forest Management

Forest plans are becoming the heart of the Forest Service's framework of management. It is taking us time to fully incorporate forest plans and planning into the way we do business.

The forest planning process served to forge many new relations within the Forest Service staff. Planning increased awareness and cooperation of those representing different resource areas and academic disciplines through the interdisciplinary process. All who participated have gained an increased knowledge of the national forests and their resources' complementarities and limitations. However, the limitations have been more prominent than the complementarities.

Clearer guides for managing resources have resulted from forest planning. The standards and guidelines identified in every forest plan match appropriate activities to each area of the national forest. Identification of these standards and guidelines also has increased the predictability and public awareness of how the national forests will be managed. Resources and environmental qualities are better protected.

Our understanding of the planning task is increasing as we work with the people, the process, and the resources. A coherent multilevel framework for planning and decisionmaking is emerging. Our immediate challenge is to articulate the framework and then use it with consistency.

The forest planning process, even though it is imperfect, has proven to be a frontier of participation in agency decisionmaking. Forest planning was, and is, a forum for citizen participation in resource management that was probably not fully envisioned at the beginning. Citizens *are* influencing Federal natural resource allocations that directly affect them—at the level of material goods and at deeper levels of meaning.

Nine Principles of Good Planning

These principles of good planning came from the technical teams and from The Conservation Foundation and Purdue University. They are based on messages from the public, other agencies, and Indian tribes gathered through interviews, from written comments, and in 16 workshops held across the country and one held in Washington, D.C. In all, more than 3,500 people contributed to the development of these principles of good planning. To be successful, planning must do the following.

Integrate and balance resources. Good planning is truly interdisciplinary. It integrates consideration of *all* resources; it does *not* pit one resource against another.

Communicate a clear vision. Good planning generates a vision of the future. The vision is forged from people's best thoughts about each national forest's ability to make unique contributions to meeting local, regional, and national needs.

Recognize limits. Good planning recognizes the limits to the productive capacity of the national forests. Good planning determines that mix of goods and services that the forest can likely produce in perpetuity.

Seek informed consent. Citizens are invited to make contributions continuously. People in the agency welcome and nurture citizens' involvement. Decisions are made and explained openly. Dialog among disparate interests is facilitated.

Complete within a reasonable time. Planning is completed within a reasonably short period. This will allow an increment of planning and decision-making to address a relatively stable set of key players and manageable number of issues. Shorter duration will allow fostering of good spirits throughout the effort.

Orient toward people. Good planning is personalized when it is recognized that individuals make the difference. Citizen involvement is welcomed and appreciated. Efforts of people in the agency are recognized and rewarded.

Be actively led by line officers. From regional forester to district ranger, line officers are actively involved and provide personal leadership in planning. The forest supervisor especially gives planning high personal priority. Where a forest plan has been deemed a success by participants inside and outside the agency, a forest supervisor was there who understood the social and political environment, was able to read the forest's constituency well, and personally navigated the plan through the reefs of public controversy.

Match analysis to questions at hand. Sufficient and current inventory data should be available on which to base plan decisions. It is recognized that information always is incomplete; likewise, if an extraordinary effort is made to collect *everything*, the data inevitably are out of date. Thus, priorities are established—resources for data collection and research are focused on what is

required to help solve a problem or address an issue. Moreover, analytical tools are used appropriately by managers to evaluate options—the tools do not drive the decisionmaking process.

Be locally oriented and nationally balanced. Good planning is locally oriented. Forest planning is aimed at guiding the management of individual forests. Recognizing that a national forest cannot be sealed off from the rest of the world, forest planning must, to the extent it can, consider broader issues, too. While focusing on issues confronting a particular national forest, there is a recognition that the capacity to locally resolve issues that have become topics of *national* controversy—such as those swirling around the protection of the northern spotted owl—is limited; these issues will be resolved in other forums.

Future Challenges

The forest plans that are regarded most favorably by informed publics and Forest Service managers are those that were developed with significant amounts of intense dialog, influential participation, and compromise with local people and groups. These were typically national forests where regional or national issues were not at stake. The biggest challenge for the 1990's is finding socially and politically acceptable solutions for dealing with dominant regional and national issues while still preserving the integrity of national forest planning.

Many people are beginning to wonder whether national forests can continue to be everything to everyone at the level they demand. This question should be the cornerstone of every forest plan. If the forest plan sets forth nothing else, it should clearly spell out resource capabilities and the role of the national forest in meeting the needs of its constituents.

Shorten the Time It Takes To Complete a Plan

One of the biggest concerns raised internally and externally was the amount of time it took to prepare a forest plan and implement it. The public felt that the planning process took entirely too long. Planning took so long that our public involvement efforts were often experienced as disjointed isolated events. The size and shape of issues often changed dramatically between the time planning was initiated and decisions were made.

Conduct Planning in Smaller Increments

Forest plans and planning have proven to work only in an incremental and participatory fashion. The Forest Service needs to shorten the time it takes to develop a forest plan. We need to build in effective public involvement throughout the process so that changes in issues and interested people can be addressed in the planning process without causing a delay. Forest plans do not develop the final permanent answer. They are successive iterations of our and the public's best thinking.

Clearly Articulate Resource Capabilities and Limitations

Sound analytical tools and information are absolutely necessary to gain an adequate understanding and articulation of resource capabilities and limitations. There is, however, a seemingly infinite ability of people to require more and more out of planning and the people in charge of it. Absolute perfection in analysis is not attainable in the real world of incomplete information, limited understanding, and uncertainty. It is important to identify critical areas where information and analysis are needed and to match analysis requirements carefully to the questions at hand—considering staffing, budgets, and existing technologies.

Find Ways To Balance Local, Regional, and National Priorities

It is a challenge to maintain the integrity of individual forest plans and the planning framework while dealing with regional and national issues. There are issues that are best handled regionally, and regional guides provide one good opportunity to do so.

Many national forests became embroiled in major national issues that complicated various aspects of the planning process and also caused delays in implementing the plans. The purpose of forest planning is to address local problems and determine how regional and national issues (for example, wilderness and roadless areas) can be addressed at the local level. Where a national forest could draw in people who represented local interest groups, local offices of State agencies, local government, and ordinary citizens with an interest in the national forest, good plans were made.

Forest plans are local plans—they address local issues and define a resource future from a local perspective. The plans in total present a litany of local opportunities, but they may not, in aggregate, fully meet broader national priorities set by Congress or the President.

Build Effective Human Relations

One of the most important components of the planning process is the Forest Service's ability or inability to deal effectively with the public. When people in the agency were successful in dealing with the public, the planning process was much smoother. When agency people were not so skilled, the process did not work as well. There were some basic problems in dealing with people that need more attention during future planning.

People in the agency should carefully think through their expectations for public involvement. What do we want from the public for their commitment, time, and their support for final decisions? Ideally, the public will become part of the solution. However, for them to want to be part of and support the solution, people in the agency need to invest a lot of time and loving care in building relationships.

Be Sensitive to People's Emotions

One of the most important dimensions of working with people is learning how to deal with emotional responses. During the last decade of planning, we tried to meet emotional responses with technical solutions. This did not work for several reasons; we misinterpreted the emotional aspect of the responses, or we did not address the underlying issues because our technical tools did not fit, or we ignored the messages imbedded in the emotions because we did not understand them. The Forest Service needs to improve its sensitivity to the emotional aspects of issues. The agency needs to recognize that emotional input and response are valid pieces of information from people who are affected by forest decisions.

Achieve Integrated, Interdisciplinary Resource Management

The Forest Service organization is designed along single-resource staff lines, such as wildlife, timber, range, recreation, and lands. NFMA and NEPA specify integrated interdisciplinary planning and decisionmaking. Forest plans are intended to depict a desired future condition for the forest as a whole. The Forest Service must find ways to integrate implementation of forest plans and ensure that decisions made outside of forest plans fit with the plans or lead to amendments to or revisions of the plans.

Integrate Programming, Budgeting, and Appropriations

The appropriation and Administration budget process funds each resource area separately, rather than as an integrated whole. The Forest Service needs to work with the Administration and Congress to find ways to structure future budgets in a way that encourages rather than inhibits interdisciplinary integrated forest management.

Effectively Deal With Multifaceted Issues

Many current issues transcend separate resource areas, affecting many separate resource areas. Timber issues, for example, are often wildlife issues. Unfortunately, we sometimes respond to issues too narrowly. The Forest Service is designed organizationally to address yesterday's problems, not the ones we are confronting today or will likely confront tomorrow. Effectively dealing with issues often requires taking concerted action to provide multifaceted, integrated responses to issues that have simultaneous effects in many resource areas.

Fuel Forest Plans With the Dollars They Require

Although we did not set out to make forest plans a budget document, they have become a catalyst for budget debates at both the local and national level, both within the Administration and in Congress. Forest plans released a wave of expectations that can largely be satisfied only through Federal funding. There is an opportunity to use the plans in a way that results in a greater portion of the Government's discretionary funding being dedicated to resource management.

Keep Forest Plans Current

Now that we have many forest plans, we need to use them. Our challenge is twofold. The first is achieving the program balance envisioned in the forest plans. This challenge requires integrating plan decisions with the agency's programming, the President's budgeting, congressional appropriations, and congressional intent expressed in legislation. The second challenge is keeping the plans alive—continuing to guide forest management by the plan's vision and management direction and improving the plans and management direction as the situation changes.

Find Ways To Make the Changes Suggested in the Recommendations

The final challenge is to pull together and focus people's attention and ideas on the changes that need to be made to improve planning and its results.

Many recommendations—232 in all—have been developed as part of the Critique. Many of them overlap. Some recommended adjustments are big, some are small, and they affect many aspects of how the agency does business. All deserve serious consideration, for each recommendation represents not just the thinking of one person, but the thinking and concurrence of many people. These people understand a particular aspect of a problem or future challenge.

All of the recommendations are based on the premise that national forest plans are important and that they form the heart of the agency's framework for management of the national forests. Recommendations, therefore, apply to all four management activities: planning, organizing, implementing, and controlling. Seven major recommendations were rigorously developed from the 232 recommendations in an iterative fashion. Developing these recommendations involved people who actively participated in the critique, as well as newly enlisted people—particularly the synthesis team members, who are all listed as authors of the synthesis. The major recommendations are as follows.

Planning

Recommendation I: *Simplify, Clarify, and Shorten the Planning Process* (51 recommendations).

- Reduce and clarify planning regulations and direction.
- Provide for incremental forest plan revision.
- Provide maximum responsibility and authority permitted by law to local resource managers.

Recommendation II: *Ensure High-Quality Planning* (90 recommendations).

- Inform and involve our publics early and continuously.
- Ensure clarity and consistency in planning direction.
- Increase commitment to planning among line officers.
- Enhance and improve our analytical tools and procedures.
- Match analytical tools to the questions at hand.

Organizing

Recommendation III: *Improve the Organizational and Administrative Infrastructure for Planning* (37 recommendations).

- Review our organizational structure to identify where changes are needed to further promote integrated resources management.

- Institutionalize planning as a profession.
- Ensure that we have skilled people for all the various planning jobs.
- Provide for greater research support to planning and the National Forest System.

Recommendation IV: *Strengthen and Clarify the Ties Between Forest Plans and Programming, Budgeting, and Appropriation Activities* (13 recommendations).

- Describe the relationships between forest plans and programming, budgeting, and appropriation activities.
- Reduce line item budgeting and adopt end-results budgeting Service-wide.
- Refine the system that links forest plans to program development and budgeting processes.

Implementing

Recommendation V: *Define, Clarify, and Explain the Resources Planning Act, NFMA, and NEPA Processes, and Explain How They Fit With the Agency's Framework for Multilevel Planning, Decisionmaking, and Management* (19 recommendations).

- Educate agency employees, citizens, and cooperators about the planning process and how the pieces fit together.
- Provide in-service training for line officers and staff on analytical methods and procedures in planning.

Recommendation VI: *Develop a Comprehensive Strategy and Clearly Assign Responsibilities for Implementation and Maintenance of Forest Plans* (15 recommendations).

- Develop a strategy for revising forest plans.
- Improve our methods for monitoring and maintaining forest plans.

Controlling

Recommendation VII: *Refurbish the Mechanisms for Quality Control, Management Review, and Forest Plan Monitoring* (7 recommendations).

- Use forest plans as the standard for measuring both individual and organizational performance.
- Disseminate the results of quality control and management reviews, and the decisions from appeals and litigation.

Epilogue

This Critique marks the end of one decade of planning and the beginning of another. It is the hope of each of the many people who contributed to the Critique that all who read it will find it useful to help shape their own expectations of forest planning and to form a better understanding of how they can best be involved. It also is hoped that the collective view of all the contributors put down in one place will serve to empower those who conduct forest planning in the future.

List of Critique Reports

Synthesis of the Critique of Land Management Planning—Forest Service (Gary Larsen, Arnold Holden, Dave Kapaldo, John Leasure, Jerry Mason, Hal Salwasser, William E. Shands of The Conservation Foundation, and Susan Yonts-Shepard)

National Forest Planning: Searching for a Common Vision—The Conservation Foundation and Purdue University (William E. Shands, V. Alaric Sample, and Dennis LeMaster)

Organization and Administration—Forest Service (Jerry Schmidt, Ed Ryberg, Berwyn Brown, Jim Ehlers, Doug Glevanik, Pamela Jakes, and Roberta Moltzen)

Analytical Tools and Information—Forest Service (Tom Hoekstra, Gregory S. Alward, A. Allen Dyer of Colorado State University, John G. Hof, Daniel B. Jones, Linda A. Joyce, Brian M. Kent, Randall C. Sheffield, and Robert Williams)

Public Participation—Forest Service (John W. Russell, Toni Stewart, Carolyn Bye, Mike Lunn, James Caplan, Ed Schultz, Orville D. Grossarth, Ron Scott, and Hank A. Deutsch)

Effectiveness of Planning Coordination—Forest Service (Thomas A. Fulk, William G. Bradshaw, James M. Colby of the Bureau of Land Management, Melody S. Mobley, M. Kent Nelson, Marcus G. Phelps, Joseph E. Stutler, and Tom Wardle of the Nebraska Forest Service)

Effectiveness of Decisionmaking—Forest Service (Dale Bosworth, John Twiss, Gretchen Merrill, Dave Barone, and Bob Butler)

Usefulness of Forest Plans—Forest Service (Sonny O'Neal, George Pozzuto, Gary Rahm, Jack Weissling, Coy Jemmett, Bob Russell, John Burns, Dan Craig, Steve Bailey, Terry Hoffman, and Pete Johnston)

Analysis of an Emerging Timber Supply Disruption—Forest Service (Gary Larsen, Robert Lynn, Dave Kapaldo, and John Fedkiw of the USDA Office of Budget and Program Analysis)

Forest Plan Implementation: Gateway to Compliance With NFMA, NEPA, and Other Federal Environmental Laws—U.S. Department of Agriculture, Office of General Counsel (Michael J. Gippert and Vincent L. DeWitte)

National Forest Planning Under RPA/NFMA: What Needs Fixing?—University of California (Dennis E. Teeguarden)

Wise Use of Your Natural Resources